

Value of Census Bureau Data

Background

It is difficult to assess the full importance of Census Bureau work products. Virtually all of Census Bureau data serves as input to other sectors of the economy and is measured in connection with the value added or productivity of those sectors. Budget justifications for Census Bureau activities that relate to measurable outcomes are difficult to do without some quantifiable assessment of the work products produced. While the benefits may be great, assessing and quantifying these benefits is a daunting task.

Purpose

The purpose of this study is to determine a reasonable lower bound estimate of value that will provide information and guidance that can be used for strategic planning, and to create a sensible, readily understood methodology that can be improved and made more robust and useful over time.

Specifically, it will

1. Explore, develop and test methodologies suitable to estimating the value of Census Bureau data products used by significant sectors of society; and
2. Implement the methodologies through interviews, focus groups, surveys, electronic discussions to arrive at a value of Census Bureau data.

The intent is to identify and measure the value of Census Bureau data used by industry, retailers, non-profit organizations, governmental units for operational purposes, and others who may use it in ways that create value that is capable of measurement, however imprecise.

Explicitly excluded from this scope are uses which can not be valued, or only assessed with great difficulty, including data used as input to public policy development; to assess the performance of Federal, state or local governments; or to provide data for “recreational” uses such as casual fact checking, or genealogical research.

Objective

The overall objective of this task is to produce a set of methodologies, appropriate for each sector, that can be used and reused over time to assess the value of Census Bureau products, and to estimate a conservative “lower bound” estimate for these products that is reasonable and well understood and supported by the methodologies developed for this purpose. The methodologies will be used to obtain an aggregate estimate for the most recent year practicable. The product will be a written report, accompanied by electronic

versions in DOC and/or WPM formats. All data, information, models, computer programs, spreadsheets, and other methodologies used in preparing the report will be provided to and become the property of the Census Bureau.

One of the problems of this task is that no single approach to assigning value to these products across-the-board is likely to lead to clear results with relatively little uncertainty. This is particularly important in view of the different products produced by the Census Bureau and the different users of these products. This suggests that the methodology should be modular, in that

1. it will allow the value of Census Bureau products attributable to specific sectors to be re-estimated and revised periodically, without affecting estimates for other sectors.
2. it will permit different methodologies to be used for different sectors, depending on the quality and availability of data and/or the existence of generally accepted estimation methods for those sectors.

In this way, the study will begin a process of assessing Census Bureau value that will be updated periodically and improved over time. The report will contain the methodology, estimates, and all background data and information necessary to facilitate this.

Any methodology should provide a persuasive lower bound estimate of value.

A good example of this kind of study is Oxford Economic Research Associates, Ltd, "The Economic Contribution of Ordnance Survey GB", September 24, 1999, which appraised the economic value of maps and geographic data produced by the Ordnance Survey, a British government mapping agency. This study will be provided on request; it also can be found on the Ordnance Survey web site, at

<http://www.ordsvy.gov.uk/literatu/external/index.htm>

This study used the same methodology for each sector, but assigned different relative importance factors to each, depending on the individual circumstances. A similar approach would make sense for the Census Bureau, although some sectors could be amenable to other methodologies, including econometric modeling.

Approach

The project will progress in two phases. The first will identify products and users that have the most potential for ascribing value and develop estimation methodologies for each. It is important to include a wide range of Census Bureau products, and each of the major areas of the Census Bureau should have at least one product included in the analysis. At the least, the analysis should include products and users associated with Geography Division, Demographic Surveys Division, Foreign Trade Division, Services Division, Governments Division, and the Decennial and Economic Censuses. Some examples of the products include are TIGER, ACS, CPS, SIPP, NCVS, NHIS, and selected decennial census and

economic census products. The final list of divisions/areas covered and products included will be determined through conversations with Census Bureau staff and the contractor's and other experts and consultants.

While determining the categories of users is fairly straightforward, identifying actual users within these segments may prove more difficult. The contractor should use Census and other public resources to the extent necessary to do so.

The second phase will apply the methodologies developed during the initial phase, to produce estimates.

Deliverables

The task is split into two phases. Phase I is the User Identification and Methodology Development phase, and Phase II is the Assessment phase. Activities include:

Phase I – User Identification and Methodology Development

1. Attend post award meeting to discuss issues, work plan, and schedule, and identify a panel of experts for this task.
2. Deliver a revised statement of scope, work plan and schedule.
3. Meet with key Census Bureau Personnel and review Census Bureau documents to identify sectors of users, significant users within those sectors, and the Census Bureau data products to be evaluated.
4. Deliver an interim report summarizing sectoral users, the likely economic significance of their activity, and the likely type and degree of their dependence on Census Bureau activity, all based on discussions with Census staff.
5. Conduct Electronic discussion with the panel of experts, consultants, and Census Bureau staff to aggregate ideas for the methodologies for each of the sectors.
6. Convene a meeting with the panel of experts, consultants, and Census Bureau staff to arrive at the proposed methodologies based upon the electronic discussion.
7. Deliver an interim report identifying the proposed methodologies.
8. Conduct a test of the agreed upon methodologies using data available at hand.
9. Plan for Phase II activities which will include interviews, focus groups, surveys, and other contacts to identify the impact of Census Bureau data on significant sectors of the economy.

Phase II – Assessment

10. Implement and analyze the approaches identified. This may include interviews, surveys, focus groups, electronic discussions, or other means.
11. Produce an interim report summarizing any interviews, analyses, or other means of assessing the importance of Census Bureau data to significant sectoral users, with detailed backup materials.
12. Produce a final report, providing methodology, estimates, and supporting materials.

Telephone briefings, meetings, and summary e-mail reports, as deemed necessary by either the contractor or the Census Bureau will be required for both phases of the task.

Schedule

Phase I – User Identification and Methodology Development

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| 1. Post award meeting | within 2 wks. of task award |
| 2. Revised work plan and schedule | 2 wks. after post award mtg. |
| 3. Meeting to identify sectors of users, etc. | 2 wks. after acceptance of sched. |
| 4. Interim report summarizing sectoral users | 4 wks. after mtg. |
| 5. Electronic discussion with a panel of experts | continue for 3 wks. after interim rpt. |
| 6. Meeting with panel of experts | 1 wk. After elec. disc. ends |
| 7. Interim report identifying the proposed methodologies | 4 wks. after mtg. |
| 8. Preliminary test of methodologies | 4 wks. after interim rpt. |
| 9. Plan for Phase II | 4 wks. after preliminary test |

Phase II – Assessment (schedule to be determined based on Phase I #9)

10. Development of approach to measure value.
11. Implement and analyze the approaches identified
12. Interim report summarizing any interviews, etc.
13. Final report

Staffing and Census Staff Resources

With an emphasis on the value of Census Bureau activity, the report will focus on the analysis of benefits. In general, the contractor should utilize an analytical team with a strong track record in benefit analysis. The team will need to bring to bear technical skills in surveys, focus groups, and interviews to conduct the study and estimate the value of Census Bureau work.

The contractor should work with experts and consultants, including Census Bureau employees, to develop and employ the specific methodologies needed. Experts could include Oxford Economic Research Associates Ltd analysts, as well as others with strong survey, operations research and economics skills.

A member of the Census Bureau Analytical Consulting Team will be available to provide guidance and assistance to the contractor. Other Census Bureau staff, such as the Marketing Services Office, may provide services to the project as needed, but the contractor should be prepared to provide all analytical, editorial, and administrative resources.

Government Furnished Materials

The Census Bureau will arrange for interviews with its staff and make available marketing and other information that may be necessary and that is agreed to in approving the contractor-prepared schedule.

Performance Measures

The Census Bureau is looking for a report that is on-time, does not exceed budget, and is complete, conservative, accurate, clear, persuasive, and repeatable.

Performance measures will include

1. Meeting all schedule dates.
2. Staying within budget.
3. Producing a report, the executive summary of which is clear to a non-specialist, and the body of which is clear and well-organized.
4. Making assumptions that a non-specialist would agree are explicit, reasonable and conservative.
5. Successful adherence to approved quality assurance standards, evidenced by a quality assurance statement with sign offs by contractor-preparers and contractor and other reviewers of the report.

Other performance measures may be proposed by the contractor or the Census Bureau prior to acceptance by the Census Bureau of the interim report on methodology.